Experimental Techniques in Gas-Surface Interaction

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Abstract

in this talk I will present several experimental techniques currently used to investigate gas-surface interaction related to acid rain, photochmical smog, and polar ozone depletion. These experimental techniques include: mass spectrometry (both electron-impact ionization and chemical ionization), infrared spectrometry, environmental and conventional scanning electron microscopies, x-ray elemental analysis, and low-temperature adsorption (BET analysis). These techniques have been used to measure reaction probabilities (or accommodation coefficients), to identify reaction products, and to characterize the condensed phase in a flmv-tube react or.